

ENGINEERING EXPRESS® (EX) PRODUCT EVALUATION REPORT

October 16, 2023

Application Number: FL 12574.1
EX Project Number: 23-62467

Product Manufacturer: Corrim Company, LLC
Manufacturer Address: 1870 Stillman Drive
Oshkosh, WI 54901

Product Name & Description: Fiberglass Fixed Windows

Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 1 (d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with standard ASCE 7-22 (ASD) and the Florida Building Code Eighth Edition (2023) and is, for the purpose intended, at least equivalent to that required by the Standard and Code. Re-evaluation of this product shall be required following pertinent Florida Building Code or ASCE Standard modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

EX Performance Evaluation document # 23-62467 titled "Fiberglass Fixed Windows", prepared by Engineering Express, Inc., signed & sealed by Frank Bennardo, P.E. is an integral part of this Evaluation Report, pages 1 through 5.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with ASTM E330-02 / TAS 202 test standards per test report(s) #0077-0311-05 (signed and sealed by Vinu J. Abraham, PE) by Hurricane Test Laboratory, LLC (HTL).

Large missile impact resistance and cyclic loading performance have been tested in accordance with ASTM E1886-02 & E1996-02 / TAS 201 & 203 test standards per test report(s) #0077-0311-05 (signed and sealed by Vinu J. Abraham, PE) by Hurricane Test Laboratory, (LLC).

Weathering performance has been determined in accordance with ASTM G26 and ASTM D638 test standards per test report #CCFD-001-02-02 and CCFD-001-02-01 (signed and sealed by Charles L. Thomas, PE) by PRI Asphalt Technologies (PRI).

Self-ignition temperature, smoke density and rate of burning performance have been determined in accordance with ASTM D1929, D2843 and D635 standards per test report #ETC-04-718-15524.0 (signed and sealed by Joseph L. Doldan, PE) by ETC Laboratories (ETC).

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Structural mullions have been impacted and cycled in accordance with ASTM E1886-02 & E1996-02 / TAS 201 & 203 test standards per test report(s) #0077-0311-05 by Hurricane Test Laboratory, LLC (HTL).

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Anchor Spacing.
2. Maximum Allowable Size/Pressure Combinations.
3. Glass Capacity.
4. Anchor Capacity.

Impact Resistance:

Large/Small Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports, and is accounted for in the engineering design of this product.

Wind Load Resistance:

This product has been designed to resist wind loads as indicated on its respective Performance Evaluation document (i.e. engineering document).

Installation:

The product listed above shall be installed in strict compliance with the Performance Evaluation document (i.e. engineering document), along with all components noted therein.

The product components shall be of the material specified in the Performance Evaluation document (i.e. engineering document).

Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Performance Evaluation document (i.e. engineering document) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Any alteration to the respective Performance Evaluation document will invalidate it. This product has been designed for use inside and outside of the High Velocity Hurricane Zone (HVHZ & NON-HVHZ).

Respectfully,

Frank Bennardo, P.E.
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